

What is claimed is:

1. A device useful in removing liquid from a product, comprising

a main conduit oriented vertically and open at its upper and lower ends,

an air knife means sealingly connected to an opening in the side of said main conduit and positioned in said opening to eject air or other gas downward in said main conduit, wherein the inside diameter of the main conduit between said opening and said upper end is less than the inside diameter of the main conduit below said opening,

wherein the portion of the main conduit downstream of said opening, beginning from said opening, exhibits an expansion angle of up to 3 degrees for a distance at least 6 times the diameter of the main conduit at said connection, and

gas supply means in fluid communication with the inlet of said air knife means for blowing gas into said inlet at a velocity sufficient that said gas is ejected into said main conduit at a sufficient velocity to draw air and any liquid entrained in the air into said upper end and out said lower end.

2. A device according to claim 1 wherein said expansion angle is at least 0.5 degree.

3. A device according to claim 1 having at its upper end an annular flange terminating in a planar top surface.

4. Apparatus comprising a conveyor for carrying a product, sprays above and below said conveyor for spraying liquid onto product carried on the conveyor, wherein said conveyor moves the product laterally with respect to the sprays, and, positioned beneath said conveyor, a device according to claim 1 for removing liquid from a product that was sprayed onto the product by said sprays.

5. Apparatus according to claim 4 wherein said expansion angle is at least 0.5 degree.

6. Apparatus according to claim 4 wherein said device has at its upper end an annular flange terminating in a planar top surface.